Chapter 3 Table of Contents

3. Getting Familiar with HARP 3-1
3.1 The CEIDARS-Lite Database 3-1
3.2 Facility Prioritization 3-1
3.3 Air Dispersion Analysis 3-2
3.4 Health Risk Analysis 3-2
3.5 Using the HARP Main Menu 3-2

3. Getting Familiar with HARP

Before using HARP, it will be helpful to know a little about how HARP is organized. HARP combines the tools of database management, emissions inventory, facility prioritization, air dispersion modeling, and health risk analysis into a single computer software package. All of these tools are tied to a database allowing information to be shared and utilized (Figure 3.1).

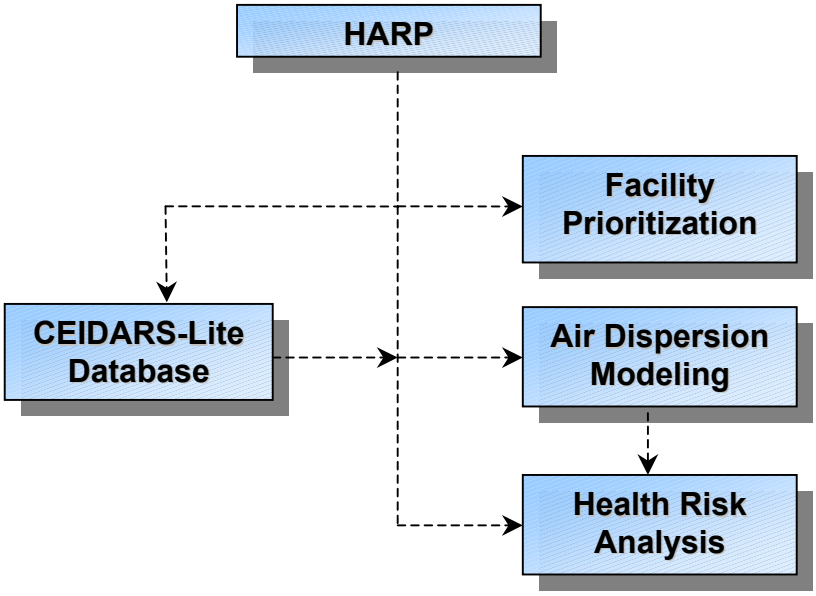

Figure 3.1 Organization of HARP. The flowchart shows how HARP is organized. Facility, emissions, and receptor information is stored in the CEIDARS-Lite database which is accessed by the analysis tools to perform air dispersion and health risk analyses.

3.1 The CEIDARS-Lite Database

The main component of HARP is the CEIDARS-Lite database from which all analysis tools are connected. The database is called CEIDARS-Lite due to its similarity to CEIDARS II, a database developed by the ARB used to track statewide pollutant emissions. CEIDARS-Lite can be used by facility operators and local air pollution control and air quality management district (district) staff to organize and manage criteria and toxics emissions data from facilities. The database can be exported to submit emissions inventory data directly to either the local air district or to the Air Resources Board (ARB). Unlike CEIDARS II, the CEIDARS-Lite database includes additional tables containing data necessary for air dispersion and health risk analysis.

3.2 Facility Prioritization

The Air Toxics "Hot Spots" Information and Assessment Act requires local air districts to prioritize facilities to determine which facilities must perform a health risk assessment. These calculations are done according to the *Air Toxics "Hot Spots" Program, Facility Prioritization Guidelines (July 1990)* developed by the California Air Pollution Control Officers Association (CAPCOA). HARP calculates facility prioritization scores according to these guidelines.

Air Dispersion Analysis

The third component of HARP is the air dispersion analysis tool. This feature allows you to easily utilize facility and receptor data from the CEIDARS-Lite database to build the air dispersion analysis input file and perform the air dispersion analysis.

3.4 Health Risk Analysis

The last component of HARP is the risk analysis tool. This portion of the program performs health risk analyses, which follow *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (August 2003) developed by OEHHA. The risk analysis tool integrates the CEIDARS-Lite database and the results of air dispersion analysis so that the risk functions can be performed within the same program. The results of the risk analysis may be displayed in a table and as risk contours. The risk contours may be overlaid on street maps, which are derived from U.S. Census Bureau Tiger files. A complete set of street maps for the state of California is included on the HARP installation CD and on the HARP website.

3.5 Using the HARP Main Menu

When you start HARP, the HARP main menu window will appear on your Windows desktop (Figure 3.2). From this menu, you can access all functions of HARP. A brief description of each of the main menu options is provided in Table 3.1.

Figure 3.2 The HARP Main Menu. The menu allows access to all functions of HARP.

Table 3.1 HARP Main Menu Options

Menu Option	*Description*
Edit Data	This menu option provides access to the various data entry and editing screens. For the purposes of editing CEIDARS facility emission data you should select the ***Facilities and Emissions*** submenu. For editing district-wide area source emissions select the ***Area Source*** submenu item. For conducting risk assessment analyses, you either select a facility already existing in the database or create a new facility using the ***Facilities and Emissions*** submenu. All facility emissions, building, and property data is accessed through the ***Facilities and Emissions*** submenu. The facility information is arranged in a set of nested windows. Begin with the *Facility Data* window. Then proceed from the *Facility Data* window, to *Device Data* window, to the *Process Data* window, and then to the *Emissions Data* window. The *Stack Data* window is not part of the nested windows. It can be accessed directly from the *Facility Data* Window. The Facility windows were designed to mimic the existing CEIDARS II database. For further information on editing facility emissions see Chapter 5. The ***Sensitive Receptors*** submenu allows you to add or edit sensitive receptor information. Sensitive receptors are used to compute the concentrations of pollutants at specific locations that usually represent some small sensitive population concentration such as a school or hospital, or any location of interest. The ***Open Database*** submenu allows you to open the default CEIDARS-Lite database or any other HARP database you create.
Reports	This menu option provides access to several different reports, which are generated from data that exists in the database. Each report can be viewed on the screen or sent to a printer. For further details on each of the reporting functions refer to Chapter 6.
Transactions	This menu option provides access to the transaction import and export functions. The transaction export function allows the export of data from the database to a transaction file in a format that can be read by the CEIDARS II.5 system at ARB. The transaction import function allows you to import data from a transaction file that has been prepared by ARB or anyone else running HARP. For further details on transaction export and import refer to Chapter 7.
Analysis	This menu option provides access to the air dispersion and health risk analysis functions.
Project	This menu option will open or create a new project directory in HARP. A project directory tells HARP where to save all of the files that it will create during the air dispersion and risk analyses.
Utilities	This menu includes several miscellaneous utilities. The most important of these is the ***Multi-year*** submenu option, which provides functions for selecting or changing the reporting year and copying data from one year to another. For further details on using the Multi-year options refer to section 5.3.
Help	Select this menu option provides helpful assistance to HARP.
Exit	Select this menu option to exit the program.